

REMARKS

Claims 1-10 remain in the application, Claims 1, 6, and 10 being independent.

The present application is directed toward formation of a polyol utilizing at least one DMC catalyst wherein the polyol has a very specific structure of an internal block comprising up to 40% by weight of the polyol wherein the internal block is either an all ethylene oxide block or contains at least 98% by weight ethylene oxide in the internal block. Subsequent to addition of the internal high ethylene oxide content internal block an external block is added to the polyol wherein the external block comprises at least one alkylene oxide having at least three carbon atoms and may include up to a maximum of 20% by weight based on the weight of the mixture of ethylene oxide.

The Examiner rejected Claims 1-9 under 35 U.S.C. § 112, second paragraph, as being indefinite. Specifically, the Examiner pointed to the language within Claims 1 and 6 of "in each case in an amount of not more than 40% by weight" and was unclear as to what was being referred to. By the present Amendment, Claims 1 and 6 have been amended to remove the language "in each case". The claims as now amended make it clear that what is intended is that the internal block, whether it be composed of all ethylene oxide or minimally 98% ethylene oxide, comprises no more than 40% by weight based on the total weight of the polyol. Thus, it is believed that this rejection is overcome and should be withdrawn.

The Examiner rejected Claims 1-10 under 35 U.S.C. § 103(a) as being unpatentable over the teachings of *Hartman '854* in view of WO 97/27236.

Rejection of a claim under 35 U.S.C. § 103(a) based on a combination of references requires a showing of a teaching, suggestion, or motivation to combine the prior art references.

In re: Sang Su Le, 277 F.3d 1338 (Fed. Cir. 2002), citing *Brown & Williamson Tobacco Corp. v. Phillip-Morris, Inc.*, 229 F.3d 1120, 1124-25 (Fed. Cir. 2000). The suggestion, teaching or motivation must be found within the references themselves. Absent such a showing of a suggestion, teaching, or motivation the combination of the references is improper.

The reference of *Hartman* discloses preparation of a polyol by reacting ethylene oxide with an initiator followed by additional alkylene oxides. The internal block of ethylene oxide ranges from 1 to 30 weight percent based on the weight of the polyol. *Hartman* discloses only the utilization of base catalysts for this reaction. *Hartman* further discloses the possibility of adding a heteric mixture of ethylene oxide and propylene oxide or butylene oxide provided that when the heteric mixture is employed the polyol is capped with additional propylene oxide. It is well known by those of ordinary skill in the art that formation of polyols, even if they have a similar distribution of alkylene oxide in the polyol, utilizing different catalysts produce polyols having very different behaviors. *Hartman* does not disclose anywhere the utilization of DMC catalysts. Furthermore, *Hartman* does not disclose a heteric block having the low ethylene oxide content of the present invention.

The WO 97/27236 application is directed to completely different polyols from those disclosed and claimed in the present invention. The polyols disclosed in WO 97/27236 are formed utilizing DMC catalysts wherein the polyols contain an internal block of all propylene oxide that is up to 35 weight percent of the total polyol weight followed by one or more random external heteric propylene oxide and ethylene oxide blocks containing at least 2% by weight of ethylene oxide. The process of WO 97/27236 is carried out either by utilizing an oligomeric initiator already having a block of propylene oxide or utilizing a standard initiator and

polymerizing propylene oxide onto the initiator followed by the heteric block. Thus, WO 97/27236 teaches utilization of a DMC catalyst to form a polyol that is directly the opposite of that of the present invention.

The Examiner, however, suggests that the combination of *Hartman* and WO 97/27236 would lead one of ordinary skill in the art to create a polyol with a high ethylene oxide internal block followed by an external block of ethylene oxide and a three carbon alkylene oxide utilizing DMC catalysts. Applicants respectfully disagree with the Examiner's evaluation of the teachings of *Hartman* in combination with WO 97/27236. The class of polyols taught by the two references are completely different as are the catalysts utilized in the two references. It is unclear to Applicants how one of ordinary skill in the art would be lead to the present invention based on the combination of the cited references. Because the independent claims of the present application as amended include several limitations neither found in nor made obvious based on the combination of *Hartman* with WO 97/27236 the rejection of Claims 1, 6, and 10, along with the claims which depend from them, under 35 U.S.C. § 103(a) based on *Hartman* in view of WO 97/27236 is improper and should be withdrawn.

Applicants' attorney respectfully submits that the claims as amended are now in condition for allowance and respectfully requests such allowance.

Respectfully submitted,

HOWARD & HOWARD ATTORNEYS, P.C.

June 18, 2003

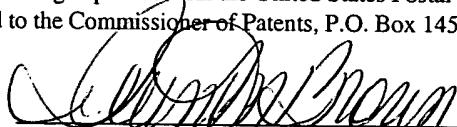
Date



Randall L. Shoemaker, Registration No. 43,118
39400 Woodward Ave., Suite 101
Bloomfield Hills, MI 48304-5151
(248) 723-0425

CERTIFICATE OF MAILING

I hereby certify that this paper or fee is being deposited with the United States Postal Service as First Class Mail, postage prepaid, in an envelope addressed to the Commissioner of Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on June 18, 2003.



Irene M. Brown